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Attorney's Docket No. <u>018775-795</u>

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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in re F	atent Application of	,	MAIL STOP AF
Hiroki	YOSHIDA	)	Group Art Unit: 2623
Applic	eation No.: 09/605,637	)	Examiner: Jingge Wu
Filed:	June 28, 2000	)	Confirmation No.: 6560
For:	IMAGE PROCESSING FOR IMAGE CORRECTION	) ) )	
	er e	)	RECEIVED
	RESPO	NS	SE MAD 0 3 2004

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 Technology Center 2600

Sir:

Claims 1, 2, 8, 10, 12, 13 and 19 have been rejected under 35 U.S.C. §102(b) as being allegedly anticipated by U.S. Patent No. 5,309,228, hereinafter Nakamura. In the Examiner's comments preceding the rejection, the Examiner indicates that the contents of Table 1 on page 8 of the specification are not included in claims 1 and 10. However, Applicant's have never argued that the preferred embodiment disclosed on page 10 of the application should be incorporated into the claims. Instead, in the response filed on September 9, 2003, to help the Examiner understand the significance of claims 1 and 10, reference was made to the preferred exemplary embodiment. However, it was clearly stated that the invention was not limited to the disclosed exemplary embodiment.

The second point argued by the Examiner prior to restating the rejection is the issue of whether or not Nakamura teaches that "characteristics of a plurality of skin colors are classified *beforehand*". The Examiner alleges that Nakamura expressly teaches using histograms to classify the colors of the input image. However, the Examiner does not address the issue as to whether or not the characteristics are classified beforehand, or during the extracting or correcting processes. Claim 1, for example, defines an image processor, "wherein characteristics of a plurality of skin colors are classified *beforehand*".

Not only does the Examiner fail to address the issue of "beforehand", in referencing Nakamura's alleged teaching of classification, the Examiner refers to column 2, lines 61-65. However, this section is within the same portion of Nakamura that the Examiner refers to for teaching the claimed area extractor. This raises the question as to whether or not the characteristics are classified beforehand or, if classified at all, whether or not it is done during the extracting or correcting procedures. In the response filed on September 9, 2003, Applicant's attorney requested the Examiner to clarify where Nakamura teaches the concept that the characteristics of a plurality of skin colors are classified beforehand, and subsequently used to extract and correct image data. Unfortunately, this issue is still not clear from the latest Official Action.

Turning attention now to claim 1, the claimed image processor includes an area extractor which extracts skin areas from input image data according to the classification (accomplished beforehand) of the characteristics of a plurality of skin colors. And, the claimed image corrector corrects image data of each of the skin areas extracted by said area extractor according to the characteristics of the skin color of each of the skin areas.

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Accordingly, in the image processor according to claim 1, image data can be corrected for each of the skin areas. Therefore, when the image includes a plurality of persons, the correction can be performed for each skin area or for each person. Thus, the image can be corrected by taking characteristics of skin colors of each of the plurality of people into account.

In contrast to claim 1, Nakamura teaches that a feature image, such as a person's face is extracted and analyzed, and the extracted data is used to control the color correction filter 16. Thus, it appears that for each photo to be printed by the apparatus of Nakamura, the feature image, such as a person's face is analyzed, and as a result of that analysis, the color correction filter 16 is adjusted for the entire photograph. Accordingly, there is no teaching in Nakamura of an image corrector which corrects image data of each of the skin areas extracted by the area extractor according to the characteristics of the skin color of each of the skin areas.

Accordingly, according to the image processor of claim 1, each of the extracted skin areas can be individually corrected according to their characteristics, wherein only one correction for the entire photograph is taught by Nakamura. Accordingly, claim 1 is clearly patentable over Nakamura.

Claim 10 defines an image processing method, wherein the characteristics of a plurality of skin colors are classified beforehand, wherein the method includes extracting skin areas from input image data according to the classification of the characteristics of a plurality of skin colors, and correcting image data of each of the extracted skin areas according to the characteristics of the skin color of each of the skin areas. Accordingly,

claim 10 is also patentable over Nakamura for the reasons set forth above with respect to claim 1.

Claim 12 is an independent claim which defines a computer readable storage medium storing a computer program which includes the steps of providing classification of characteristics of a plurality of skin colors, extracting skin areas from input image data according to the classification of the characteristics of a plurality of skin colors, and correcting image data of each of the extracted skin areas according to the characteristics of the skin color of each of the skin areas. Accordingly, claim 12, and claim 13 which depends from claim 12, are also patentable over Nakamura at least for the reasons set forth above with respect to claim 1.

Claim 19 also depends from claim 12, and is thus patentable over Nakamura at least for the reasons set forth above with respect to claims 1 and 12.

Claims 9 and 20 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Nakamura. However, claims 9 and 20 depend from claims 1 and 12, respectively, and are thus also patentable over Nakamura at least for the reasons set forth above.

Claims 7 and 18 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Nakamura in view of U.S. Patent No. 5,075,788, hereinafter Funda. The Examiner appears to be relying upon Funda for its alleged teaching of the step of generating a correction curve by modifying a color histogram. Although Applicant reserves the right to challenge the Examiner's analysis of Funda, and the motivation for combining Funda with Nakamura at a later time, if necessary inappropriate, the teachings relied upon by the

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Examiner in Funda do not overcome the deficiency of the rejection of Nakamura set forth above. Accordingly, claims 7 and 18 are also patentable over the cited prior art.

The Examiner has indicated that claims 3-6, 11, and 14-17 are patentable over the applied prior art.

In view of the foregoing remarks, the Examiner is respectfully urged to reconsider and withdraw the outstanding rejections. If there are any questions concerning this response, the Examiner is respectfully urged to telephone the undersigned attorney so that prosecution of the application may be expedited.

Respectfully submitted,

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Date: March 1, 2004

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AF 2623



Patent Attorney's Docket No. <u>018775-795</u>

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Hiroki YOSHIDA	) Examiner: Jingge Wu
Application No.: 09/605,637	Confirmation No.: 6560
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For: IMAGE PROCESSING FOR IMAGE CORRECTION	) ) )
AMENDMENT/REPLY T	RECEIVED
Commissioner for Patents	MAR 0 3 2004
P.O. Box 1450 Alexandria, VA 22313-1450	Technology Center 2600
C.F.R. § 1.20(d) are also encoded.  [ ] Also enclosed is/are  [ ] Small entity status is hereby claimed.  [ ] Applicant(s) requests continued example [ ] \$385.00 (2801) [ ] \$770.00 (180).  [ ] Applicant(s) requests that any pentered. Continued examination identified above.  [ ] Applicant(s) previously submit	mination under 37 C.F.R. § 1.114 and enclose the only fee due under 37 C.F.R. § 1.17(e).  previously unentered after final amendments not be on is requested based on the enclosed documents  tted, on, for which continued examination is
requested.  [ ] Applicant(s) requests suspense does not exceed three months 37 C.F.R. § 1.103(c). The results of the content o	ion of action by the Office until at least, which from the filing of this RCE, in accordance with equired fee under 37 C.F.R. § 1.17(i) is enclosed.

Amendment/Reply Transmittal Letter Application No. <u>09/605,637</u> Attorney's Docket No. <u>018775-795</u> Page 2

[]	A Request for Entry and Consideration of Submission under 37 C.F.R. §	1.129(a)
	(1809/2809) is also enclosed.	

- [X] No additional claim fee is required.
- [ ] An additional claim fee is required, and is calculated as shown below:

	No. OF CLAIMS	HIGHEST NO. OF CLAIMS PREVIOUSLY PAID FOR	EXTRA CLAIMS	RATE	ADD'L FEE
Total Claims		MINUS =		× \$18.00 (1202) =	
ndependent Claims		MINUS =		× \$86.00 (1201) =	
f Amendment adds mu	iltiple depend	lent claims, add \$29	0.00 (1203)		
Fotal Claim Amendme	nt Fee				
f small entity status is	claimed, sub	tract 50% of Total	Claim Amend	ment Fee	

[ ] A check in the amount of \$ is enclosed for the fee due.
[ ] Charge \$to Deposit Account No. 02-4800.
The Director is hereby authorized to charge any appropriate fees under 37 C.F.R. §§ 1.16
1.17, 1.20(d) and 1.21 that may be required by this paper, and to credit any overpayment, to
Deposit Account No. 02-4800. This paper is submitted in duplicate.
Respectfully submitted, BURNS, DOANE, SWECKER & MATHIS, L.L.P.

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